

TREC-IS 2019-B Notebook Evaluator v2.3
Run: IITBHU_run2 (IITBHU_run2)

EVALUATOR: Alertng Performance
Overall performance

> High Importance Alert Worth: -0.9793577981651376
> Low Importance Alert Worth: 0.0
> Accumulated Alert Worth: -0.4896788990825688

EVALUATOR: Information Type Categorization
Overall performance

> Information Type Precision (positive class, multi-type, macro): 0.116393696783473
> Information Type Recall (positive class, multi-type, macro): 0.13323273378182562
> Information Type F1 (positive class, multi-type, macro): 0.05488927520085425
> Information Type Accuracy (overall, multi-type, macro): 0.789184753266386
> High Importance Information Type Precision (positive class, multi-type, macro): 0.023784580151219408
> High Importance Information Type Recall (positive class, multi-type, macro): 0.0778392425810904
> High Importance Information Type F1 (positive class, multi-type, macro): 0.027476299452159375
> High Importance Information Type Accuracy (overall, multi-type, macro): 0.9116726055501566
> Low Importance Information Type Precision (positive class, multi-type, macro): 0.145638680983132
> Low Importance Information Type Recall (positive class, multi-type, macro): 0.15072541521363672
> Low Importance Information Type F1 (positive class, multi-type, macro): 0.06354600438465263
> Low Importance Information Type Accuracy (overall, multi-type, macro): 0.7505043788609848

EVALUATOR: Information Priority Level
Overall Performance

> Priority Estimation Error (mean squared error, macro): 0.1192352411056502
> Priority Estimation Error High Importance (mean squared error, macro): 0.21742274237735196
> Priority Estimation Error Low Importance (mean squared error, macro): 0.08822866175669171

LATEX

IITBHU_run2 & -0.9794 & -0.4897 & 0.0275 & 0.0325 & 0.7892 & 0.2174 & 0.1192 \\\

EVALUATOR: Information Type Categorization (Multi-type)
Per Event Performance

albertaWildfires2019

Information Type Precision (positive class, multi-type, macro): 0.08017295075854051
Information Type Recall (positive class, multi-type, macro): 0.11221449263477172
Information Type F1 (positive class, multi-type, macro): 0.038362491196465426
Information Type Accuracy (overall, multi-type, macro): 0.752560000000003
High Importance Information Type Precision (positive class, multi-type, macro): 0.009171410499683745
High Importance Information Type Recall (positive class, multi-type, macro): 0.09385113268608414
High Importance Information Type F1 (positive class, multi-type, macro): 0.016709881878421203
High Importance Information Type Accuracy (overall, multi-type, macro): 0.8980833333333332
Low Importance Information Type Precision (positive class, multi-type, macro): 0.10259448978765316
Low Importance Information Type Recall (positive class, multi-type, macro): 0.11801344840804147
Low Importance Information Type F1 (positive class, multi-type, macro): 0.04520015729690045
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.7066052631578948

cycloneKenneth2019

Information Type Precision (positive class, multi-type, macro): 0.07003972488227912
Information Type Recall (positive class, multi-type, macro): 0.14791086773889173
Information Type F1 (positive class, multi-type, macro): 0.060173027842408106
Information Type Accuracy (overall, multi-type, macro): 0.7449124562281141
High Importance Information Type Precision (positive class, multi-type, macro): 0.060983214604709936
High Importance Information Type Recall (positive class, multi-type, macro): 0.09343970605811752
High Importance Information Type F1 (positive class, multi-type, macro): 0.04821013562079294
High Importance Information Type Accuracy (overall, multi-type, macro): 0.8765215941303984
Low Importance Information Type Precision (positive class, multi-type, macro): 0.07289967549624835
Low Importance Information Type Recall (positive class, multi-type, macro): 0.16511228721703097
Low Importance Information Type F1 (positive class, multi-type, macro): 0.0639507832808129
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.7033516758379191

philippinesEarthquake2019

Information Type Precision (positive class, multi-type, macro): 0.10090467464480249
Information Type Recall (positive class, multi-type, macro): 0.09281391005770546
Information Type F1 (positive class, multi-type, macro): 0.0462734872182218
Information Type Accuracy (overall, multi-type, macro): 0.855859649122807
High Importance Information Type Precision (positive class, multi-type, macro): 0.011396011396011397
High Importance Information Type Recall (positive class, multi-type, macro): 0.010101010101010102
High Importance Information Type F1 (positive class, multi-type, macro): 0.0107095046854083
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9680868838763576
Low Importance Information Type Precision (positive class, multi-type, macro): 0.12917056830231546
Low Importance Information Type Recall (positive class, multi-type, macro): 0.11893377320192505
Low Importance Information Type F1 (positive class, multi-type, macro): 0.05750421854437342
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8204194697269489

coloradoStemShooting2019

Information Type Precision (positive class, multi-type, macro): 0.06286492249206152
Information Type Recall (positive class, multi-type, macro): 0.05856308947359354
Information Type F1 (positive class, multi-type, macro): 0.04510154446326844
Information Type Accuracy (overall, multi-type, macro): 0.8540435835351089
High Importance Information Type Precision (positive class, multi-type, macro): 0.0
High Importance Information Type Recall (positive class, multi-type, macro): 0.0
High Importance Information Type F1 (positive class, multi-type, macro): 0.0
High Importance Information Type Accuracy (overall, multi-type, macro): 0.889157923056228
Low Importance Information Type Precision (positive class, multi-type, macro): 0.08271700327902831
Low Importance Information Type Recall (positive class, multi-type, macro): 0.07705669667578097
Low Importance Information Type F1 (positive class, multi-type, macro): 0.059344137451669
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8429548447389662

southAfricaFloods2019

Information Type Precision (positive class, multi-type, macro): 0.09695989347293356
Information Type Recall (positive class, multi-type, macro): 0.17177344455118604
Information Type F1 (positive class, multi-type, macro): 0.0413601859260252
Information Type Accuracy (overall, multi-type, macro): 0.7751519644180874
High Importance Information Type Precision (positive class, multi-type, macro): 0.00832144553970517
High Importance Information Type Recall (positive class, multi-type, macro): 0.14227642276422764
High Importance Information Type F1 (positive class, multi-type, macro): 0.015723270440251572
High Importance Information Type Accuracy (overall, multi-type, macro): 0.8985668396342971
Low Importance Information Type Precision (positive class, multi-type, macro): 0.12495098228944819
Low Importance Information Type Recall (positive class, multi-type, macro): 0.1810882935365413
Low Importance Information Type F1 (positive class, multi-type, macro): 0.04945605397416424
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.7361788459287582

sandiegoSynagogueShooting2019

Information Type Precision (positive class, multi-type, macro): 0.13509964066480207
Information Type Recall (positive class, multi-type, macro): 0.09079710518764557
Information Type F1 (positive class, multi-type, macro): 0.03254199002860008
Information Type Accuracy (overall, multi-type, macro): 0.7410309278350516

High Importance Information Type Precision (positive class, multi-type, macro): 0.0
High Importance Information Type Recall (positive class, multi-type, macro): 0.0
High Importance Information Type F1 (positive class, multi-type, macro): 0.0
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9565537555228277
Low Importance Information Type Precision (positive class, multi-type, macro): 0.17776268508526588
Low Importance Information Type Recall (positive class, multi-type, macro): 0.11946987524690207
Low Importance Information Type F1 (positive class, multi-type, macro): 0.042818407932368525
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.6729710875125958

EVALUATOR: Information Type Categorization (Multi-type)
Per Information Type Performance

| Request-GoodsServices | | | | |
|------------------------------|-----------|--------|----------|---------|
| | precision | recall | f1-score | support |
| Other Classes | 1.00 | 0.94 | 0.97 | 9223 |
| Request-GoodsServices | 0.00 | 0.00 | 0.00 | 38 |
| micro avg | 0.94 | 0.94 | 0.94 | 9261 |
| macro avg | 0.50 | 0.47 | 0.48 | 9261 |
| weighted avg | 0.99 | 0.94 | 0.96 | 9261 |
| Request-SearchAndRescue | | | | |
| | precision | recall | f1-score | support |
| Other Classes | 1.00 | 1.00 | 1.00 | 9252 |
| Request-SearchAndRescue | 0.00 | 0.00 | 0.00 | 9 |
| micro avg | 0.99 | 0.99 | 0.99 | 9261 |
| macro avg | 0.50 | 0.50 | 0.50 | 9261 |
| weighted avg | 1.00 | 0.99 | 1.00 | 9261 |
| Request-InformationWanted | | | | |
| | precision | recall | f1-score | support |
| Other Classes | 1.00 | 0.59 | 0.74 | 9228 |
| Request-InformationWanted | 0.00 | 0.45 | 0.01 | 33 |
| micro avg | 0.58 | 0.58 | 0.58 | 9261 |
| macro avg | 0.50 | 0.52 | 0.37 | 9261 |
| weighted avg | 0.99 | 0.58 | 0.73 | 9261 |
| CallToAction-Volunteer | | | | |
| | precision | recall | f1-score | support |
| Other Classes | 1.00 | 1.00 | 1.00 | 9237 |
| CallToAction-Volunteer | 0.00 | 0.00 | 0.00 | 24 |
| micro avg | 0.99 | 0.99 | 0.99 | 9261 |
| macro avg | 0.50 | 0.50 | 0.50 | 9261 |
| weighted avg | 0.99 | 0.99 | 0.99 | 9261 |
| CallToAction-Donations | | | | |
| | precision | recall | f1-score | support |
| Other Classes | 0.99 | 0.61 | 0.75 | 9155 |
| CallToAction-Donations | 0.01 | 0.40 | 0.02 | 106 |
| micro avg | 0.60 | 0.60 | 0.60 | 9261 |
| macro avg | 0.50 | 0.50 | 0.39 | 9261 |
| weighted avg | 0.98 | 0.60 | 0.74 | 9261 |
| CallToAction-MovePeople | | | | |
| | precision | recall | f1-score | support |
| Other Classes | 0.99 | 1.00 | 0.99 | 9158 |
| CallToAction-MovePeople | 0.00 | 0.00 | 0.00 | 103 |
| micro avg | 0.99 | 0.99 | 0.99 | 9261 |
| macro avg | 0.49 | 0.50 | 0.50 | 9261 |
| weighted avg | 0.98 | 0.99 | 0.98 | 9261 |
| Report-FirstPartyObservation | | | | |
| | precision | recall | f1-score | support |
| Other Classes | 0.97 | 0.94 | 0.95 | 8942 |
| Report-FirstPartyObservation | 0.05 | 0.09 | 0.06 | 319 |
| micro avg | 0.91 | 0.91 | 0.91 | 9261 |
| macro avg | 0.51 | 0.51 | 0.51 | 9261 |
| weighted avg | 0.93 | 0.91 | 0.92 | 9261 |

| Report-ThirdPartyObservation | | | | | |
|------------------------------|-----------|--------|----------|---------|--|
| | precision | recall | f1-score | support | |
| Other Classes | 0.85 | 0.95 | 0.90 | 7785 | |
| Report-ThirdPartyObservation | 0.29 | 0.10 | 0.15 | 1476 | |
| micro avg | 0.82 | 0.82 | 0.82 | 9261 | |
| macro avg | 0.57 | 0.53 | 0.52 | 9261 | |
| weighted avg | 0.76 | 0.82 | 0.78 | 9261 | |

| Report-Weather | | | | | |
|----------------|-----------|--------|----------|---------|--|
| | precision | recall | f1-score | support | |
| Other Classes | 0.88 | 1.00 | 0.93 | 8123 | |
| Report-Weather | 0.00 | 0.00 | 0.00 | 1138 | |
| micro avg | 0.88 | 0.88 | 0.88 | 9261 | |
| macro avg | 0.44 | 0.50 | 0.47 | 9261 | |
| weighted avg | 0.77 | 0.88 | 0.82 | 9261 | |

| Report-Location | | | | | |
|-----------------|-----------|--------|----------|---------|--|
| | precision | recall | f1-score | support | |
| Other Classes | 0.46 | 0.97 | 0.63 | 4351 | |
| Report-Location | 0.31 | 0.01 | 0.02 | 4910 | |
| micro avg | 0.46 | 0.46 | 0.46 | 9261 | |
| macro avg | 0.39 | 0.49 | 0.33 | 9261 | |
| weighted avg | 0.38 | 0.46 | 0.31 | 9261 | |

| Report-EmergingThreats | | | | | |
|------------------------|-----------|--------|----------|---------|--|
| | precision | recall | f1-score | support | |
| Other Classes | 0.94 | 0.66 | 0.78 | 8621 | |
| Report-EmergingThreats | 0.09 | 0.46 | 0.15 | 640 | |
| micro avg | 0.65 | 0.65 | 0.65 | 9261 | |
| macro avg | 0.52 | 0.56 | 0.47 | 9261 | |
| weighted avg | 0.88 | 0.65 | 0.74 | 9261 | |

| Report-NewSubEvent | | | | | |
|--------------------|-----------|--------|----------|---------|--|
| | precision | recall | f1-score | support | |
| Other Classes | 0.98 | 1.00 | 0.99 | 9051 | |
| Report-NewSubEvent | 0.05 | 0.00 | 0.01 | 210 | |
| micro avg | 0.98 | 0.98 | 0.98 | 9261 | |
| macro avg | 0.51 | 0.50 | 0.50 | 9261 | |
| weighted avg | 0.96 | 0.98 | 0.97 | 9261 | |

| Report-MultimediaShare | | | | | |
|------------------------|-----------|--------|----------|---------|--|
| | precision | recall | f1-score | support | |
| Other Classes | 0.62 | 1.00 | 0.76 | 5719 | |
| Report-MultimediaShare | 0.37 | 0.00 | 0.01 | 3542 | |
| micro avg | 0.62 | 0.62 | 0.62 | 9261 | |
| macro avg | 0.49 | 0.50 | 0.38 | 9261 | |
| weighted avg | 0.52 | 0.62 | 0.47 | 9261 | |

| Report-ServiceAvailable | | | | | |
|-------------------------|-----------|--------|----------|---------|--|
| | precision | recall | f1-score | support | |
| Other Classes | 0.96 | 0.96 | 0.96 | 8916 | |
| Report-ServiceAvailable | 0.00 | 0.00 | 0.00 | 345 | |
| micro avg | 0.93 | 0.93 | 0.93 | 9261 | |
| macro avg | 0.48 | 0.48 | 0.48 | 9261 | |
| weighted avg | 0.93 | 0.93 | 0.93 | 9261 | |

| Report-Factoid | | | | | |
|----------------|-----------|--------|----------|---------|--|
| | precision | recall | f1-score | support | |

| | | | | |
|----------------|------|------|------|------|
| Other Classes | 0.62 | 0.55 | 0.58 | 6019 |
| Report-Factoid | 0.31 | 0.38 | 0.34 | 3242 |
| micro avg | 0.49 | 0.49 | 0.49 | 9261 |
| macro avg | 0.46 | 0.46 | 0.46 | 9261 |
| weighted avg | 0.51 | 0.49 | 0.50 | 9261 |

| | | | | |
|-----------------|-----------|--------|----------|---------|
| Report-Official | precision | recall | f1-score | support |
| Other Classes | 0.92 | 0.99 | 0.95 | 8486 |
| Report-Official | 0.11 | 0.01 | 0.02 | 775 |
| micro avg | 0.91 | 0.91 | 0.91 | 9261 |
| macro avg | 0.52 | 0.50 | 0.49 | 9261 |
| weighted avg | 0.85 | 0.91 | 0.87 | 9261 |

| | | | | |
|---------------|-----------|--------|----------|---------|
| Report-News | precision | recall | f1-score | support |
| Other Classes | 0.69 | 0.98 | 0.81 | 6421 |
| Report-News | 0.25 | 0.02 | 0.03 | 2840 |
| micro avg | 0.68 | 0.68 | 0.68 | 9261 |
| macro avg | 0.47 | 0.50 | 0.42 | 9261 |
| weighted avg | 0.56 | 0.68 | 0.57 | 9261 |

| | | | | |
|----------------|-----------|--------|----------|---------|
| Report-CleanUp | precision | recall | f1-score | support |
| Other Classes | 0.99 | 0.91 | 0.95 | 9201 |
| Report-CleanUp | 0.01 | 0.13 | 0.02 | 60 |
| micro avg | 0.91 | 0.91 | 0.91 | 9261 |
| macro avg | 0.50 | 0.52 | 0.48 | 9261 |
| weighted avg | 0.99 | 0.91 | 0.94 | 9261 |

| | | | | |
|-----------------|-----------|--------|----------|---------|
| Report-Hashtags | precision | recall | f1-score | support |
| Other Classes | 0.73 | 1.00 | 0.84 | 6757 |
| Report-Hashtags | 0.50 | 0.00 | 0.00 | 2504 |
| micro avg | 0.73 | 0.73 | 0.73 | 9261 |
| macro avg | 0.61 | 0.50 | 0.42 | 9261 |
| weighted avg | 0.67 | 0.73 | 0.62 | 9261 |

| | | | | |
|----------------------|-----------|--------|----------|---------|
| Report-OriginalEvent | precision | recall | f1-score | support |
| Other Classes | 0.90 | 1.00 | 0.95 | 8322 |
| Report-OriginalEvent | 0.00 | 0.00 | 0.00 | 939 |
| micro avg | 0.90 | 0.90 | 0.90 | 9261 |
| macro avg | 0.45 | 0.50 | 0.47 | 9261 |
| weighted avg | 0.81 | 0.90 | 0.85 | 9261 |

| | | | | |
|-----------------------------|-----------|--------|----------|---------|
| Other-ContextualInformation | precision | recall | f1-score | support |
| Other Classes | 0.98 | 0.63 | 0.76 | 9014 |
| Other-ContextualInformation | 0.04 | 0.51 | 0.07 | 247 |
| micro avg | 0.62 | 0.62 | 0.62 | 9261 |
| macro avg | 0.51 | 0.57 | 0.42 | 9261 |
| weighted avg | 0.95 | 0.62 | 0.75 | 9261 |

| | | | | |
|---------------|-----------|--------|----------|---------|
| Other-Advice | precision | recall | f1-score | support |
| Other Classes | 0.97 | 1.00 | 0.98 | 8947 |
| Other-Advice | 0.00 | 0.00 | 0.00 | 314 |
| micro avg | 0.97 | 0.97 | 0.97 | 9261 |
| macro avg | 0.48 | 0.50 | 0.49 | 9261 |

| | | | | |
|--------------|------|------|------|------|
| weighted avg | 0.93 | 0.97 | 0.95 | 9261 |
|--------------|------|------|------|------|

Other-Sentiment

| | precision | recall | f1-score | support |
|-----------------|-----------|--------|----------|---------|
| Other Classes | 0.92 | 1.00 | 0.96 | 8481 |
| Other-Sentiment | 0.20 | 0.00 | 0.01 | 780 |
| micro avg | 0.91 | 0.91 | 0.91 | 9261 |
| macro avg | 0.56 | 0.50 | 0.48 | 9261 |
| weighted avg | 0.86 | 0.91 | 0.88 | 9261 |

Other-Discussion

| | precision | recall | f1-score | support |
|------------------|-----------|--------|----------|---------|
| Other Classes | 0.95 | 0.97 | 0.96 | 8805 |
| Other-Discussion | 0.01 | 0.01 | 0.01 | 456 |
| micro avg | 0.92 | 0.92 | 0.92 | 9261 |
| macro avg | 0.48 | 0.49 | 0.48 | 9261 |
| weighted avg | 0.90 | 0.92 | 0.91 | 9261 |

Other-Irrelevant

| | precision | recall | f1-score | support |
|------------------|-----------|--------|----------|---------|
| Other Classes | 0.58 | 0.17 | 0.27 | 6224 |
| Other-Irrelevant | 0.31 | 0.74 | 0.43 | 3037 |
| micro avg | 0.36 | 0.36 | 0.36 | 9261 |
| macro avg | 0.44 | 0.46 | 0.35 | 9261 |
| weighted avg | 0.49 | 0.36 | 0.32 | 9261 |